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Exploring dark creativity: the role of power in an unethical marketing task

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ABSTRACT

Creativity is seen as a significant driver for successful marketing activities. However, little attention is paid to its shady side and little research on the prerequisites for unethical behaviour of marketing experts and executives is on hand. In our experimental study, we examine the mutual influence of power, honesty-humility, and benevolent creativity as predictors for 'dark creativity' (the use of creative ideas for malevolent actions). Participants ($N=387$) were randomly assigned to a high vs. low power condition (role of marketing director vs. marketing intern). Dark creativity was correlated to benevolent creativity, power motive, and honesty-humility, but did not depend on the power condition participants have been assigned to. In a hierarchical regression analysis only benevolent creativity and power motive predicted dark creativity. Additional variance was explained by role identification. This article is the first to investigate the impact of power on creativity in an immoral occupational task. Our findings support the concept of dark creativity as a combination of cognitive abilities and motivational aspects. The manipulation of power condition should be replicated in further research.

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Creativity; dark creativity; power; unethical marketing task; marketing expert

1. Introduction

One of the *4P* of marketing (McCarthy, 1960) is the development and implementation of a promotional strategy. In doing so, the *novelty* of a product gets advertised, and, at best, demand is developed and intensified by strengthening the *usefulness* of the product. Both attributes – novelty and usefulness – are the very same, which define creative products in general (Mumford, 2003). Accordingly, creativity is seen as a significant driver for successful marketing activities (Bharadwaj & Menon, 2000; Im & Workman Jr, 2004; Ramocki, 1994).

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However, although ethical behaviour in business is becoming increasingly important (Vallaster, Kraus, Lindahl, & Nielsen, 2019), only little research focuses on the shady side of creativity so far. Some researchers recently introduced the concept of malevolent or dark creativity (Cropley, Cropley, & Runco, 2010; Cropley, Kaufman, & Cropley, 2008; Lee & Dow, 2011). Dark creativity is defined as the use of original ideas to gain an unfair advantage through manipulation (Cropley, 2010a) or even to deliberately damage others (Cropley, Kaufman, White, & Chiera, 2014). This other side of the coin is related to dishonesty, lying, and lack of integrity (Beaussart, Andrews, & Kaufman, 2013; Gino & Ariely, 2012; Walczyk, Runco, Tripp, & Smith, 2008), physical aggressiveness (Lee & Dow, 2011), crime (Eisenman, 2008), and terrorism (James & Drown, 2008). An exemplary case of dark creativity in marketing went public in September 2015 when Martin Shkreli, CEO of Turing Pharmaceuticals, dramatically increased the price for Daraprim from US\$13.50 to US\$750 per pill.

First studies are examining the appearance of dark creativity in context with strong and harmful impact. But contrary to the call for empirical studies on dark creativity at the workplace from Janssen, van de Vliert, and West (2004) as well as Shalley, Zhou, and Oldham (2016), up to date no empirical study investigated the negative side of creativity in conjunction with everyday occupational tasks. In addition to this research gap, little is known about the motivation and individual psychological factors behind hurtful creative behaviour. Creativity is reflected by a cognitive process of divergent and evaluative thinking (Palmer, 2016). Motivational factors, personality, and environmental as well as social influences determine whether the creative outcome is either good or bad.

To fill these research gaps, studies on dark creativity with a clear focus on job context are necessary. Creativity is relevant for almost every occupation and the requirement to improve processes or products is not limited to specific hierarchical levels, educational background, or sectors. In sum, creativity is an ability that is required at jobs that '(a) allow for a certain degree of autonomy, as well as for those who (b) are aimed at improving products and processes' (Schuler & Görlich, 2007, p. 4). On firm level, creativity is of utmost importance, when organisations have to continuously innovate in order to survive and grow. Innovation is at the core of entrepreneurship (Ferreira, Fernandes, & Kraus, 2019; Ward, 2004). At the same time, being an entrepreneur comes with great power, which is supposed to be one of the drivers for dark creativity and in turn malevolent innovation (Cropley, 2010). Research on dark creativity is therefore especially relevant for entrepreneurship.

Therefore, this study aims at two main goals. First, the character of dark creativity in an occupational setting, defined as the generation and use of creative ideas for malevolent actions in a specific marketing task, is investigated. Second, the influence of power as a driver for malevolent creativity on individual level is researched. More precisely, holding a powerful position or evaluating oneself as power-motivated is expected to promote dark creativity. Thereby this article contributes to the current discussion about the nature of dark personality traits and unethical behaviour at work (Cropley et al., 2010; Gaddis & Foster, 2015; Kraus, Berchtold, Palmer, & Filser, 2017; O'Boyle Jr, Forsyth, Banks, & McDaniel, 2012). Furthermore, it adds knowledge

to the theoretical research framework of creativity, that combines theories and concepts from psychology (e.g., creativity, personality), sociology (e.g., group effects, cf. Janssen et al., 2004), and literature from business and management (e.g., innovation).

2. Theoretical framework

2.1. Dark creativity

Creativity leads to bright ideas and innovative breakthroughs, as well on individual level as on group level, and both in economic context and in society (Palmer, 2016). In general, creativity is a desirable trait, which enables to originate eminent achievements in various fields from fine arts, entrepreneurship and management, medicine to engineering or computer and network sciences (c.f. Cropley, 2010). Nevertheless, Smith (2005) counts more than 100 definitions of creativity – and in doing so focuses on psychology literature only.

However, the *4P taxonomy of creativity* (Mooney, 1963; Rhodes, 1961) offers a well-established framework to cluster the various approaches to the creativity phenomenon. Depending on the primary focus, creativity can be seen as person, press, process, and product. The creative *person* is characterised by a combination of cognitive (intelligence, knowledge), non-cognitive (personality) and motivational (need for creativity, interests, achievement motivation) abilities and predispositions (Palmer, 2016). Creativity as a trait can either be assessed by self-reports, peer or supervisor ratings, biographical evidence or tests of actual creative performance. *Press* describes the creative environment, which nurtures employees' creative potential. Amongst others, providing complex tasks or support by supervisors are fruitful conditions to maximise creative achievements (Cummings & Oldham, 1997). *Process* deals with the challenges one faces on her or his way from initial recognition of a problem or demand to a sustainable and accepted creative solution. Psychological literature proposes several process models (for an overview see Howard, Culley, & Dekoninck, 2008; Palmer, 2016). In this paper, the creativity process will not be covered as no theoretically supported hypotheses are derived. Regarding creative outcomes, to be evaluated as creative, an idea or *product* must be useful on the one hand, and show novelty on the other hand (Mumford, 2003; Plucker, Beghetto, & Dow, 2004). Useful means valuable, effective, efficient, and contributing to society; novel refers to unusual, unique, new viewpoints, varied, original, breaking from existing patterns (Palmer, Cesinger, Gelléri, Putsch, & Winzen, 2015).

At first sight, only positive attributes are listed to classify products as creative. But creativity can also be directed in a negative way. Sometimes individuals as well as groups 'work on developing creative means toward negative ends' (James, Clark, & Cropanzano, 1999, p. 212). The current diesel emissions cheating scandal (c.f. Overly & Frankel, 2017, January 10) serves as an example of 'dark creativity'. Contriving new ways of stealing from a company is another one. In 2017, white-collar crime cost American companies an average mean loss of US \$1.13 million (per company; HISCOX, 2017).

Whilst the relevance of negatively directed creativity is quite obvious in practice, only little research deals with the dark side of creativity. To begin with the

product-based approach to creativity, ideas or products can be rated as positively or negatively creative depending on their desirability for the majority of people or their damaging result (Clark & James, 1999; James et al., 1999). Cropley et al. (2008) combine product with person and distinguish *benevolent* from *malevolent* creativity. Malevolent creativity refers to creativity that is considered to fulfil desirable goals of individuals, groups or even society, but has severe negative consequences for others and the former fully intended these negative outcomes. In tradition of the 4P of creativity, Cropley (2011) proposes 'secondary labels' for eight types of creativity depending on different combinations of product (good vs. bad), person (benevolent vs. malevolent), process/press (supportive vs. obstructive). In a nutshell, the crucial point in the distinction of different types of creativity is the person's intent to cause damage.

Empirical findings for a relationship between creativity and 'bad' outcomes are scarce, though the few yet existing literature supports the existence of dark creativity. Creativity comes along with breaking rules (Houtz et al., 2003). In contrast, integrity is characterised by the willingness to comply with rules and norms (Beaussart et al., 2013). Therefore, creativity correlates negatively with objective as well as self-reported integrity (Beaussart et al., 2013). Beaussart et al. (2013) used a measure of creativity in the traditional benevolent conceptualisation. The contrast between intended malevolent creativity and integrity is expected to be even stronger.

Divergent thinking ability as a cognitive measure of a person's creativity is correlated positively with lying (number of lies and their effective novelty, respectively; Walczyk et al., 2008). Furthermore, creativity is linked to dishonesty. Creative individuals tend to cheat more often than less creative ones, whereas greater ability to justify dishonest behaviour mediates the correlation (Gino & Ariely, 2012; Mai, Ellis, & Welsh, 2015). In turn, participants who have been over-reporting their performance in problem-solving tasks showed higher creativity in subsequent tasks (Gino & Wiltermuth, 2014). As the authors controlled for dispositional creativity of cheaters and non-cheaters, individual differences in creativity did not account for the increase in creativity. The authors explored the mechanisms underlying the dishonesty-creativity link and identified a heightened feeling of being unconstrained by rules as the common characteristic. Harris and Reiter-Palmon (2015) add two other individual factors to facilitate malevolent creativity: high implicit aggression and low premeditation. Implicitly aggressive people are not necessarily aware of their aggression and view the world as a hostile place. Combined with lower levels of premeditation, a facet of impulsivity that includes lower levels of careful thinking and planning before acting (Whiteside & Lynam, 2001), those individuals tend to think and act 'fast and furious' and show malevolent creativity. Aggression and the perception of a hostile environment are linked to perceived justice (Folger & Baron, 1996). In line, Clark and James (1999), who manipulated perceived justice in an experiment, report increased malevolent creativity for the participants treated unjustly. Harris and Reiter-Palmon (2015) support the press factor for malevolent creativity by highlighting situational cues like overt hostility, anger, injustice, and retaliation.

Summarising, empirical evidence for the existence of dark creativity is on hand. Dark creativity is as well associated with specific personality traits (*person*) as

environmental conditions (*press*). However, studies applying measures of actual creative performance are missing (cf. Beaussart et al., 2013; Shalley, Zhou, & Oldham, 2016). Dark creativity is a new subfield in creativity research (Lee & Dow, 2011) that will benefit from studies assessing performance data as therewith a more valid prediction of unethical behaviour is to be expected. Thereby, dark creativity is not a stand-alone, unrelated concept but is strongly related to creativity in general. In line with Cropley (2011), dark creativity is highly overlapping with 'traditional' creativity. Though, the two sides of creativity can be distinguished by their either malevolent or benevolent outcomes (Cropley, 2011; James & Taylor, 2010).

Hypothesis 1: Benevolent creativity performance predicts dark creativity as a measure of performance in an unethical creativity task.

2.2. Power

Besides affiliation and achievement, power is one of the three basic motives (McClelland, 1961, 1985). Power is the (potential) influence in terms of 'relative control over another's valued outcomes' (Fiske & Berdahl, 2007, p. 679) and is associated with dominance and seeking high positions in hierarchy (Schönbrodt, Unkelbach, & Spinath, 2009).

Power motivation is positively related to creativity (Zhang, Fan, & Zhang, 2015). Highly power-motivated individuals show a noticeable proclivity to creativity, in particular if they receive positive feedback (Fodor & Carver, 2000; Fodor & Greenier, 1995) and creative thinking contributes to their goals (Gervais, Guinote, Allen, & Slabu, 2013).

Moreover, power is negatively correlated with fear (Schönbrodt et al., 2009) and positively related to risk-taking (Boneva et al., 1998) and unethical work behaviour, such as corruption (Bendahan, Zehnder, Pralong, & Antonakis, 2015).

Hypothesis 2: Power motive predicts dark creativity.

Ferrell and Gresham (1985) propose a multidimensional view on unethical decision making in marketing. First, they highlight psychological traits, such as creativity, personality, and power motive, as factors contributing to dark outcomes of marketing activities. Second, organisational factors comprise top management's power and authority as well as frequency of contact with others (supervisors or peers) showing (un)ethical patterns. Third, corporate policy, ethics, and codes as well as rewards versus punishment for unethical behaviour are subsumed under 'the opportunity variable' (p. 93) that predicts (un)ethical behaviour.

This framework points to an essential difference in the conceptualisation of power within studies regarding unethical behaviour, such as dark creativity. It is of utmost importance to differentiate between an individual's power motive, which is usually assessed by self-ratings and reflects the inner need to have impact and to be influential, and holding a powerful position, which is a social role attributed to the person and coming with demands for compliance.

According to Sligte, de Dreu, and Nijstad (2011) individuals in a powerful position are more creative than their powerless counterparts. In addition, powerful individuals take more risks in their decisions (Anderson & Galinsky, 2006).

Hypothesis 3: Holding a powerful predicts dark creativity.

2.3. Personality

The Big Five personality taxonomy is widely adopted in industrial and organisational psychology. Though, a sixth dimension of personality has been replicated over the last two decades (Lee, Ashton, & Shin, 2005): Honesty-humility. On facet level honesty-humility includes sincerity, fairness, greed avoidance, and modesty. People scoring high on honesty-humility are considered as honest and fair. In contrast, low honesty-humility is related to anti-social behaviour at workplace (Lee et al., 2005), delinquency (de Vries & van Gelder, 2015), unethical decision making (de Vries, Pathak, van Gelder, & Singh, 2017; Heck, Thielmann, Moshagen, & Hilbig, 2018). Moreover, lower honesty-humility is correlated with higher creativity (Silvia, Kaufman, Reiter-Palmon, & Wigert, 2011).

Hypothesis 4: Honesty-humility negatively predicts dark creativity.

Given previous findings from research on dark creativity and unethical behaviour at the workplace (Anderson, Potocnik, & Zhou, 2014; James et al., 1999; Janssen et al., 2004), it is hypothesised:

Hypothesis 5: Power motive, holding a powerful position, honesty-humility, and creative personality show incremental validity in the prediction of dark creativity over benevolent creativity.

3. Methodology

3.1. Sample

To research dark creativity in marketing context and the promoting influence of power on generating harmful ideas, an online experiment was run in early 2018. Following a snowball sampling approach, the link to the study was sent via a mailing list of psychology students at a German university and posted in social networks, such as Facebook and Instagram. In total, 442 participants completed the online study. However, 50 participants refused to work on the unethical marketing task measuring dark creativity. In addition, two participants had to be excluded from the sample as they had given implausible information regarding age and gender. Thus, the final sample consisted of 387 individuals. The 297 female (76.7%) and 90 (23.3%) male participants had a mean age of 27.14 years ($SD = 11.32$). For 383 (99%) participants German was their first language; the remaining four participants rated their language skills at least as conversant. The majority of the sample (73.9%) was either pupil, student or trainee, 77 individuals (19.8%) reported to be employee or public official, 12 participants (3.1%) were self-employed, six participants (1.6%) were retiree

and six participants (1.6%) were unemployed. The mean professional experience was 4.97 years ($SD = 10.01$), 56 participants (14.5%) held a leadership position.

3.2. Measures

3.2.1. Demographics

After a short welcome text informing about the voluntary nature and anonymity of the study, demographic data, such as age (in years), gender (male, female, other), German language skills (from 1 = first language to 5 = basic knowledge), employment status (1 = pupil/student/trainee, 2 = employee/public official, 3 = self-employed/freelancer, 4 retiree, 5 = unemployed), professional experience (in years), and leadership (0 = no leadership position, 1 = have or had a leadership position) was gathered. Age and gender were used as control variables in the analysis.

3.2.2. Creativity

Expanding creativity in its usual benevolent character by the concept of dark creativity, the creativity baseline (i.e., 'light', benevolent creativity) had to be controlled. Thus, one item of a creativity test (Palmer, 2016) was applied. Participants had to identify target groups for a specific product and generate cost-saving actions to market the product. The item score results from the sum of answers given.

3.2.3. Personality

Subsequently, personality was assessed by selected scales of the HEXACO-200 (Lee & Ashton, 2012) using 5-point Likert scales (1 = strongly disagree, 5 = strongly agree). Honesty-humility was measured with 32 items (Cronbach's Alpha: .87). Creative personality as a facet of the openness to experience domain was assessed with 8 items (Cronbach's Alpha: .75) and as a self-rated measure of creativity.

3.2.4. Power

The effect of power was investigated twofold, which is a distinctive characteristic of this study: first, participants' self-rated power motive was assessed; second, participants were randomly assigned to either a high or a low power experimental group. The power motive was captured by an index measure combining three scales of different power inventories and a one-item measure developed for this study. First, the power scale of the Motive Profile following the Zurich Model (MPZM, 6 items; Schönbrodt et al., 2009) was applied, which deals with hierarchy and dominance issues. Second, the two items of the dominance scale of the Personality Adjective Scales (PASK-5; Brandstätter, 2009) were used, which give information about the participants' individualism (vs. willingness to adapt) and need for self-assertion (vs. willingness to subordinate). Third, the power item of the Short Schwartz's Value Survey in German (SSVS-G; Boer, 2014) was administered. In addition, the participants were asked, if they were convinced that their ideas, given in the dark creativity task, would be pursued later on (4-point Likert scale; 1 = not applicable at all, 4 = totally applicable). All items were z-standardised to build the mean used as power motive index (Cronbach's Alpha: .79).

Table 1. Means, standard deviations, and correlations among study variables.

	M	SD	1	2	3	4	5	6	7	8	9
<i>Control variables</i>											
1 Age	27.14	11.32									
2 Sex	0.77	0.42	-.13**								
<i>Central study variables</i>											
3 Benevolent Creativity	8.57	3.88	-.25**	.11*							
4 Power Motive	0.05	0.64	-.01	-.16**	.19**						
5 Power Position	1.50	0.50	.05	.02	.00	-.07					
6 Honesty-Humility	3.68	0.46	.05	.21**	-.10*	-.51**	.12**				
7 Creative Personality	3.28	0.63	.04	-.06	.18**	.24**	-.01	-.13**			
8 Role Identification	2.42	1.04	-.01	-.16**	.15**	.36**	-.12**	-.16**	.16**		
9 Immorality Rating	3.73	0.59	-.05	.08	.06	-.16**	.06	.24**	-.02	-.15**	
10 Dark Creativity	4.32	2.54	-.13**	.04	.39**	.25**	.03	-.11*	.15**	.27**	-.07

Note. Sex coded 0 for male and 1 for female.

Power position coded 1 for marketing team leader and 2 for low power condition (marketing intern).

* $p < .05$, ** $p < .01$; one-sided.

3.2.5. High versus low power condition

After the assessment of demographic data, baseline creativity, personality, and power motive, the participants were introduced to 'JMT Medical Care GmbH', a fictitious pharmaceutical company. To manipulate a high vs. low power condition, participants were randomly put either in the role of a marketing team leader (high power condition) or in the role of a marketing intern (low power condition). Team leaders had to distribute leftover items from an exhibition to themselves and/or team members (5 rounds of distribution). In turn, interns did not possess the power to make gifts. They had to count leftover items from the exhibition.

3.2.6. Dark creativity

Participants then showed their potential for dark creativity in a simulation of an unethical marketing task. As marketing employees, the employees got an e-mail from the CEO's assistant. Based on Martin Shkreli's Daraprim deal, participants were briefed to generate as many arguments as possible to legitimate an immense increase in the pricing (from 12.99€ to 799.99€ per pill) of a fictional HIV drug called 'Pyrizin'. The measure for dark creativity comprises the number of arguments generated within three minutes.

3.2.7. Manipulation checks

The online study ended with two manipulation checks. First, participants were asked to rate the immorality of the procedure of JMT Medical Care GmbH on a 4-point Likert scale (1 = not applicable at all, 4 = totally applicable). Second, they were asked, if they could identify with their role as an employee of JMT Medical Care GmbH (4-point Likert scale, 1 = not applicable at all, 4 = totally applicable).

Table 1 gives the descriptive statistics and correlations of the measures.

4. Results

The participants rated the price rise as highly immoral ($M = 3.73$, $SD = 0.59$ on a 4-point Likert scale), which indicates a successful simulation of an unethical marketing task measuring dark creativity. Dark creativity was correlated moderately positive

Table 2. Summary of hierarchical regression analysis for dark creativity (N = 387).

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Benevolent Creativity	.26	.03	.39***	.23	.03	.36***	.22	.03	.34***
Role Identification				.52	.11	.21***	.42	.12	.17***
Power Motive							.47	.20	.12***
R^2	.15***			.20***			.21***		
<i>F</i>	69.09***			46.79***			33.49***		
ΔR^2				.04***			.01***		
ΔF				20.92***			5.74***		

Note. Method: Stepwise.

Excluded Variables: Age, sex, power position, honesty-humility, creative personality.

* $p < .05$, ** $p < .01$, *** $p < .001$.

with benevolent creativity ($r = .39$, $p < .01$; H1) and self-reported power motive ($r = .25$, $p < .01$; H2). Contrary to hypothesis 3, participants holding a power position did not show higher scores in dark creativity ($M = 4.24$, $SD = 2.78$) than participants in a low power position ($M = 4.40$, $SD = 2.33$; $t(385) = .02$, $p > .05$; H3). Honesty-humility was correlated negatively with dark creativity ($r = -.11$, $p < .05$; H4).

Hierarchical regression analysis was used to test hypothesis 5 (see Table 2) applying the stepwise method. As groups in high versus low power condition differed regarding their role identification (high: $M = 2.54$, $SD = 1.02$; low: $M = 2.29$, $SD = 1.043$; $t(385) = 2.40$, $p < .05$), role identification was included in addition to controls and H5's variables. The significant IVs combined explained a significant 21% of variance in dark creativity ($R^2 = .21$, $F(3, 383) = 33.49$, $p < .001$).

In step 1, benevolent creativity was significantly correlated with dark creativity ($\beta = .39$, $p < .001$). In step 2, role identification was included, resulting in a .04 increase in R^2 ($\Delta F = 20.92$, $p < .001$), and role identification was associated with dark creativity ($\beta = .21$, $p < .001$). In step 3, power motive ($\beta = .12$, $p < .05$) explained additional 1.2% of variance ($\Delta F = 5.74$, $p < .05$). In contrast to H5 only an individual's power motive holds incremental validity over general ('benevolent') creativity. Holding a powerful position, honesty-humility, and creative personality as well as age and sex were excluded from the regression.

Table 3 provides a summary of the hypotheses, respective methods, and outcomes within this paper.

5. Discussion and conclusion

Though, organisational views on (un)ethical behaviour of companies are contributing to management literature, it is the individuals working for these companies, who are responsible for the (un)ethical decisions and actions (Mascarenhas, 1995). This study describes the interplay of an individual's creativity, power, role identification, and personality in an unethical marketing task, which captures the potential of dark creativity.

In line with literature, benevolent creativity and dark creativity are overlapping constructs as performance in respective tasks is significantly correlated (H1). Furthermore, power motive (H2) and honesty-humility (H4) are related to dark creativity, which highlights personality traits as stimulating factor for malevolent performance. In contrast, the effect of holding a powerful position (H3) is ambiguous.

Table 3. Summary of hypotheses, methods, and outcomes.

Hypothesis	Method	Outcome
H1: Dark Creativity is positively correlated with benevolent creativity performance.	Correlation	H1: supported
H2: Power motive is positively correlated with dark creativity	Correlation	H2: supported
H3: Individuals in a powerful position are higher in dark creativity than individuals in a low power position.	t-test	H3: rejected
H4: Honesty-humility is negatively correlated with dark creativity.	Correlation	H4: supported
H5: Power motive, holding a powerful position, honesty-humility, and creative personality show incremental validity in the prediction of dark creativity over benevolent creativity	Hierarchical Regression	H5: (partially) rejected

With respect to this study's findings, performance in an immoral task is not dependent on the power condition a respective individual is assigned to. On the other hand, participants with real-life leadership experience showed less dark creativity (leaders: $M = 3.68$, $SD = 2.49$, non-leaders: $M = 4.42$, $SD = 2.54$; $t(385) = 2.04$, $p < .05$), whilst they were significantly more power motivated and did not differ in honest-humility. Herewith the theoretical assumption of D. H. Cropley (2011) stating obstructing press, such as attributed power in a leadership position, can turn a person's benevolent intentions into bad products is in question and, instead, the concept of 'with greater power comes greater responsibility' seems to be supported.

Taking a multidimensional view on individual factors contributing to unethical behaviour at work (H5), power motive shows incremental validity over benevolent creativity. That is, controlling for baseline benevolent creativity power motivated people gave more answers in an immoral creativity task. Power comes with less perspective taking and empathy (Galinsky, Magee, Inesi, & Gruenfeld, 2006) and is linked to achievement motivation (Schönbrodt et al., 2009), both explaining why people engage in tasks requiring unethical performance. Whereas intrinsic power motive is an antecedent of dark creativity, holding a power position does not show a direct effect. Honesty-humility and creative personality are not relevant as well. Whereas the first finding can be attributed to the strong link between power motive and honesty-humility (Lee et al., 2013), the latter might result from the artistic-oriented understanding of creativity (Palmer, 2016) in the measure applied to test creative personality. However, role identification incrementally predicts dark creativity. These findings indicate the effect of commitment at work and point to harmful outcomes of job dedication. Unethical behaviour at work might less depend on hierarchy and related authority or general personality traits (Palmer, Niemand, Stöckmann, Kraus, & Kailer, 2019), but more on job-related psychological variables.

6. Implications for research and practitioners

This study has several implications for research on creativity and innovation. Malevolent performance in creativity tasks can be seen as the dark side to general creativity. Therefore, the traditionally positively connotated concept of creativity has to be expanded to darker outcomes in the future. Above all, our results highlight the importance to take personality variables into account in order to deepen our

understanding of creative performance. Especially motivational factors, such as a high strive for power, seem an interesting avenue for further research. Furthermore, creativity is the personality trait underlying organisational innovation (Palmer, 2016; Bouncken, Brem, & Kraus, 2016) and thus, individual potential for dark creativity could contribute to malevolent innovations on firm level. Future research, thereby, should replicate this study with a sample of employees and executives and empirically research if firm-level variables and other factors, such as co-workers, leadership styles or cultural aspects (cf. Janssen et al., 2004), moderate the relation between individual dark creativity and malevolent innovation.

Practitioners, however, should be aware of the concept of dark creativity and innovation and be trained in the detection of early signs of derailing creativity. Contributing individual variables, such as a high power motive, could be detected in respective personality assessments when employees are hired or participate in personality development programmes. Furthermore, in high risk environments, where the pressure to innovate is high and individuals hold powerful positions, the institution of supervisory instances which could take corrective actions is recommended.

7. Limitations

Alternative explanations for the missing effect of holding a powerful position on dark creativity are the absence of consequences for unethical behaviour (Mazar, Amir, & Ariely, 2008) and the reduced autonomy and responsibility in the dark creativity task (Ferrell & Gresham, 1985), which was requested by the superior. Further research should test power manipulations ideally in high-stake testing and avoiding these limitations. Furthermore, attention should be turned to a more balanced sample regarding gender ratio and occupational background.

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